Abstract

This invention relates to a structure and method for repairing SDRAM by generating a Slicing Table of Fault Distribution and using the size of SDRAM page as the partition basic block. The Slicing Table of Fault Distribution is generated at each booting or memory-testing, and the elemental range of the number of detected defects is formed. When the number of detected defects exceeds the elemental range, the limits of the other partition block with lower rate of defect are used to cure the defect. The repair bit is also encoded according the Slicing Table of Fault Distribution, pointing to the remapping bit so that the access operation occurs at the remapping bit. As such, the cost of producing, testing and repairing SDRM is greatly reduced.